

**THE APPOINTMENT OF A SPECIALIST CONTRACTOR  
FOR THE CONSTRUCTION OF A WET WASTE STORAGE FACILITY  
NEC 4 EC SHORT CONTRACT**

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 1</u></b>			
	<b><u>PRELIMINARIES</u></b>			
	<b><u>NEC 4 AGREEMENT - Engineering and Construction Short Contract</u></b>			
	<b><u>FIXED CHARGE ITEMS</u></b>			
	<u>Contractual requirements</u>			
1	Contractual requirements		SUM	
	<b><u>Establishment of facilities on the site</u></b>			
	<u>Facilities for engineer/employer's agent</u>			
2	Furnished air-conditioned offices (1 No.)		SUM	
3	Name boards		SUM	
	<u>Facilities for contractor</u>			
4	Offices and storage sheds		SUM	
5	Workshops		SUM	
6	Laboratories		SUM	
7	Living accommodation		SUM	
8	Ablution and latrine facilities		SUM	
9	Tools and equipment		SUM	
10	Water supplies, electric power and communications		SUM	
11	Dealing with water		SUM	
12	Access		SUM	
13	Plant		SUM	
	<b>Carried Forward</b>		R	
	Section No. 1 Preliminaries (NEC 4) Bill No. 1 Preliminaries			

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	<b>Brought Forward</b>		R	
	<u>Other fixed charge obligations</u>			
14	Other fixed charge obligations		SUM	
	<u>Removal of site establishment</u>			
15	Removal of site establishment		SUM	
	<b><u>TIME RELATED ITEMS</u></b>			
	<u>Contractual requirements</u>			
16	Contractual requirements		SUM	
	<b><u>Operation and maintenance of facilities on site, for duration of construction, except where otherwise stated</u></b>			
	<u>Facilities for engineer/employer's agent</u>			
17	Furnished air-conditioned offices (1 No.)		SUM	
18	Name boards		SUM	
	<u>Facilities for Contractor</u>			
19	Offices and storage sheds		SUM	
20	Workshops		SUM	
21	Laboratories		SUM	
22	Living accommodation		SUM	
23	Ablution and latrine facilities		SUM	
24	Tools and equipment		SUM	
25	Water supplies, electric power and communications		SUM	
26	Dealing with water		SUM	
27	Access		SUM	
28	Plant		SUM	
	<b>Carried Forward</b>		R	
	Section No. 1			
	Preliminaries (NEC 4)			
	Bill No. 1			
	Preliminaries			

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Brought Forward		R	
<u>Supervision for duration of construction</u>			
Supervision for duration of construction		SUM	
<u>Company and head office overhead costs for the duration of the contract</u>			
Company and head office overhead costs for the duration of the contract		SUM	
<u>Other time related obligations</u>			
Other time related obligations		SUM	
<b><u>TEMPORARY WORKS</u></b>			
Protection of any exposed sections, etc. until construction in vicinity is complete		SUM	
Other related temporary works		SUM	
<b><u>OTHER</u></b>			
Environment		SUM	
Health and Safety		SUM	
Carried to Final Summary		R	
Section No. 1 Preliminaries (NEC 4) Bill No. 1 Preliminaries			

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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>BILL NO. 2</u></b></p> <p><b><u>ALTERATIONS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>Tenderers are advised to study the "General Preambles for Trade".</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>Making good of finishes shall be deemed to include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary</p> <p>The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)</p> <p><u>Removal of doors, windows, frames, etc</u></p> <p>Where doors, windows, etc are described as taken out, this shall be understood to include for removal of all beads, architraves, ironmongery, etc. Doors, windows, etc that are to be re-fixed are to be provided with new architraves</p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to remain the property of the employer shall be carefully taken out, temporarily stored and handed over to the employer</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2</p> <p>Wet Waste Storage Facility</p> <p>Bill No. 1</p> <p>Alterations (Provisional)</p>			

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<p style="text-align: center;"><b>Brought Forward</b></p> <p>Doors, fanlights, windows, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehanging, cramping up, re-wedging as required and making good cramps, dowels, etc, and oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately</p> <p>Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good to match existing</p> <p><u>Forming new openings or altering openings in existing walls</u></p> <p>Where new openings are formed or openings altered in existing walls, the wall above the opening shall be broken out and a new brick, in-situ or prestressed concrete lintel inserted, complete with the necessary reinforcement, formwork, turning piece, etc, the jambs and portions of openings as described shall be built up with new brickwork or blockwork properly toothed and bonded to existing, cavities of hollow walls shall be closed where necessary and finishes shall be made good all round and into reveals</p> <p><u>Building up openings</u></p> <p>Where existing openings are described as building up, the existing surfaces all round shall be prepared as necessary, brickwork or blockwork properly toothed and bonded to existing, wedged up to underside of existing lintel and finishes shall be made good on both sides</p> <p>Cement screeds and pavings, granolithic, etc shall be levelled and prepared for the raising of brickwork</p> <p><u>Protection</u></p> <p>The contractor must protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc, from damage during the progress of the work and provide all necessary materials for so doing</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 2 Wet Waste Storage Facility Bill No. 1 Alterations (Provisional)</p>		R	

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Brought Forward			R
<b><u>REMOVAL OF EXISTING WORK</u></b>			
<u>Breaking down and removing reinforced concrete, including cutting off and removing reinforcement</u>			
1	330mm Thick concrete walls to create an opening for a double door	m2	2
2	330mm Thick concrete walls underneath the concrete staircase	m2	4
3	2,100 x 1,100mm Wide concrete stairs	m2	2
<u>Diamond grind the substrate until large aggregate is exposed and remove all traces of dirt and cement laitance and crumbling or detached portions, and make the surface rough and absorbent to received new floor finish.</u>			
4	Concrete suspended slab	m2	2 931
<u>Lift up, clean and replace sundry metalwork</u>			
5	Mentis rectagrid floor grating, size 3,100 x 1,000m wide fixed to concrete, including cutting frame and sinking rectagrid 6mm deep.	No	26
6	Saw cut behind rectagrid frame to create a joint between frame and concrete (expansion joint measured elsewhere).	m	213
<u>Taking out and removing doors, windows, etc including threshold, sills, etc (building up openings and making good finishes elsewhere)</u>			
7	Timber single door and frame not exceeding 2,5m <sup>2</sup>	No	1
<b>Carried Forward to Summary of Section No. 2</b>			R
Section No. 2			
Wet Waste Storage Facility			
Bill No. 1			
Alterations (Provisional)			

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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>BILL NO 3</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>Tenderers are advised to study the "General Preambles for Trade".</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests for approval. The testing shall be undertaken by an approved independent firm or institution nominated by the contractor (test cubes are measured separately)</p> <p><u>Formwork</u></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p> <p>Formwork to soffits of solid slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2</p> <p>Wet Waste Storage Facility</p> <p>Bill No. 2</p> <p>Concrete, Formwork &amp; Reinforcement</p>			

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	<b>Brought Forward</b>			R	
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	<b><u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u></b>				
	<u>30MPa/19mm concrete</u>				
1	Stairs including landings, beams and inverted beams	m3	1,0		
	<b><u>TEST CUBES</u></b>				
2	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	2		
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<u>Rough formwork to sides</u>				
3	Edges, risers, ends and reveals not exceeding 300mm high	m	4,8		
	<u>Rough formwork to soffits</u>				
4	Stairs with sloping soffits propped of stairs	m2	2		
5	Landings	m2	1		
	<b><u>REINFORCEMENT</u></b>				
	<u>High tensile steel reinforcement to structural concrete work, as per the engineer's recommendation.</u>				
6	Various diameter bars	t	0,21		
	<b>Carried Forward to Summary of Section No. 2</b>			R	
	Section No. 2				
	Wet Waste Storage Facility				
	Bill No. 2				
	Concrete, Formwork & Reinforcement				



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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2</u></b>			
	<b><u>BILL NO 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>PREAMBLES</u></b>			
	Tenderers are advised to study the "General Preambles for Trade".			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<u>"Mapefloor CPU+" or similar approved polyurethane-cement primer applied with a rubber squeegee or with a roller as prescribed by manufacturer's instruction</u>			
1	On suspended concrete slab	m2	2 898	
2	On turn-ups and turn-downs not exceeding 300mm girth	m	648	
	<b><u>JOINT SEALANTS, ETC</u></b>			
	<u>"Mapeflex PU35 CR" or similar approved polyurethane sealing compound including backing cord, bond breaker, primer, etc. applied using a conventional manual, electric or pneumatic silicone gun as per manufacturer's instructions</u>			
3	Sealing compound 6 x 10mm in floors	m	392	
4	Sealing compound 6 x 6mm in floors (Around the cable trenches)	m	256	
5	Sealing compound 6 x 6mm in floors (Around the 3,100 x 1,000mm wide steel plate)	m	219	
	<b>Carried Forward to Summary of Section No. 2</b>			
	Section No. 2			
	Wet Waste Storage Facility			
	Bill No. 3			
	Waterproofing			
			R	

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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO 2</u></b></p> <p><b><u>BILL NO 5</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>Tenderers are advised to study the "General Preambles for Trade".</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere</p> <p><b><u>TIMBER DOORS, WINDOWS, ETC</u></b></p> <p><b><u>DOORS ETC</u></b></p> <p><u>Solid core, hung to structural steel frame including ironmongery complete for a PC amount of R2 000.00 (Two Thousand Rand)</u></p>			
1	<p>1,700 x 2,335mm high double door (Reference Drawing No: NNDD-V-14-C-L2-0001_R1 SHT 2 OF 2)</p>	No	1	
	<p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2 Wet Waste Storage Facility Bill No. 4 Carpentry &amp; Joinery</p>		R	

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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>BILL NO 6</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>Tenderers are advised to study the "General Preambles for Trade".</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><u>1,6mm Thick pressed mild steel double rebated frame suitable for 330mm thick concrete wall, red oxide primed. Prepared for painting as per engineer's specifications.</u></p>			
1	<p>Frame for double door 1,700 x 2,335mm high</p> <p><b><u>STEEL MINOR WORK</u></b></p> <p><u>Hot dipped galvanised lintel beam</u></p>	No	1	
2	<p>IPE 100 x 55mm (Refer to Drawing No. NNDD-V-14-C-L2-0001_R1 SHT 1OF 2)</p>	m	3	
	<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 2 Wet Waste Storage Facility Bill No. 5 Metalwork</p>		R	

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	Brought Forward			R	
	<u>Bolts</u>				
3	M16 Chemical anchor	No	8		
	<u>Welded beams in single lengths with flat bearer and connection plates, bolted to concrete walls</u>				
4	Crane I-beam between the concrete wall (Refer to Drawing No. NNDD-V-14-C-L2-0001_R1 SHT 1 OF 2), installed complete as per the manufacturer specifications	No	1		
	<u>Steel plates, with holes as per engineers specifications</u>				
5	250 x 100 x 16mm Thick flat connection (Double door lintel)	No	2		
6	6mm Thick Flat metal plate torch weld to 3,100 x 1,100mm rectagrid	No	26		
7	8mm Thick U-Shaped trench cover plate, total girth 1,280 mm (2xNo 420mm deep + 440mm wide)	m	124		
	<u>Bolted frames to concrete floor</u>				
8	50 x 50 x 5mm L-shaped Angle section	m	648		
	<u>Flat bars welded to angles</u>				
9	50 x 4.5 x 60mm Long	No	88		
	<u>Trolley ramp including "Ramp 2 Rub 1) bolted to the floor, installed complete as per engineers details. Refer to Drawing No NNN-V-14-C-L1-0007 R2 SHT 2 OF 2</u>				
10	1,545 x 1,200mm Wide	No	4		
<b>Carried Forward to Summary of Section No. 2</b>				R	
Section No. 2					
Wet Waste Storage Facility					
Bill No. 5					
Metalwork					

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2</u></b>			
	<b><u>BILL NO 7</u></b>			
	<b><u>PREAMBLES</u></b>			
	Tenderers are advised to study the "General Preambles for Trade".			
	<b><u>SCREEDS</u></b>			
	<u>"Mapefloor CPU+/HD" polyurethane-cement mortar or similar approved screed straight trowel or squeegee fitted with thickness rulers on concrete applied as per manufacturers instructions.</u>			
1	8mm Thick on a U-Shaped trench cover plate	m2	55	
2	6mm Thick on a 6mm thick flat metal plate	m2	81	
	<u>"Mapefloor CPU+/Cove" polyurethane cement mortar or similar approved cement mortar for coves and details applied as per the manufacturers instructions.</u>			
3	Against galvanised steel angles	m	648	
	<b>Carried Forward to Summary of Section No. 2</b>			
	Section No. 2			
	Wet Waste Storage Facility			
	Bill No. 6			
	Plastering			

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2</u></b>			
	<b><u>BILL NO 8</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PREAMBLES</u></b>			
	Tenderers are advised to study the "General Preambles for Trade".			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>PAINT SPECIFICATIONS</u></b>			
	All painting shall be done in accordance to the engineer specifications unless otherwise described			
	<b><u>ON CONCRETE FLOOR</u></b>			
	<u>"Mapefloor CPU+/HD" @ 6mm high strength polyurethane/cement based coating or similar approved, applied on the floor and distributed as per manufacturers specifications.</u>			
1	Suspended concrete slab	m2	2 898	
2	On turn-ups and turn-downs not exceeding 300mm girth.	m	648	
	<b><u>ON METAL SURFACES</u></b>			
	<u>One coat steel primer, and one coat undercoat, and two coats water-based paint recommended by the engineer</u>			
3	Door frames	m2	3	
	<b><u>ON WOOD SURFACES</u></b>			
	<u>One coat primer and two coats premium quality polyurethane enamel paint</u>			
4	Timber doors	m2	8	
	<b>Carried Forward</b>			
	Section No. 2 Wet Waste Storage Facility Bill No. 7 Paintwork		R	

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Section No	<u><b>FINAL SUMMARY</b></u>	Page No		Amount
1	Preliminaries (NEC 4)	3		
2	Wet Waste Storage Facility	16		
	<u>Contingency</u>			
	Allow a sum of R 225 000.00 (Two Hundred and Twenty Five Thousand rand) for contingencies to be used at the client's discretion. To be deducted partly or in full by the client.	Item		225 000,00
	<b>Carried to Form of Tender</b>		R	